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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,796	09/15/2003	Wai Kai Wong	9046/31	9510
757	7590	09/09/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			PHILOGENE, HAISSA	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/662,796

Applicant(s)

WONG ET AL.

Examiner

Haissa Philogene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 19-23, 30, 43-47 and 59-63 is/are rejected.
- 7) ☒ Claim(s) 6-18, 24-29, 31-42, 48-58, 64 and 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/22/03 & 3/14/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 19, 20, 30, 43-45, 59-63 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong, Patent No. 5,969,479.

As per claim 1, Wong discloses in Fig.6 a frequency controlled lighting system comprising: a motion switch (102) to generate an activation signal in response to movement of the motion switch, the activation signal indicating at least one of duration and frequency of electrical engagement within the motion switch; a controller (64, 66, 68, 70-76, 92, 103-109) electrically connected to the motion switch to receive the activation signal; and lighting elements (80-84), electrically connected to the controller, the lighting elements (80-84) selectively actuated by the controller (via 78 and 70-76) to illuminate the lighting elements in one or more predetermined illumination patterns dependent on the duration and frequency of electrical engagement indicated by the activation signal (via 64, 66, 68, 92) (see Col.8, line 9- Col.9, line 18).

As per claims 2 and 3, Wong discloses the motion switch being a spring motion switch including a spring (37) having a fixed end and a free end, and a metal contact (38) positioned proximate the free end of the spring for electrical engagement by the free

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end of the spring. The recited limitation "the duration of electrical engagement is the duration of time the free end of the spring electrically engages the metal contact" is inherent based on how long or short the user wants the spring switch to stay closed so as to generate a sufficient electric pulse which may be delivered to the lighting system.. As per claim 19, Wong discloses that the frequency controlled lighting system (112 in Fig.8 or 62-76 and 92 in Fig.6) is located in a piece of footwear (110) such that the controller (64, 66, 68, 70-76, 92, 103-109 in Fig.7) and motion switch (102 in Fig.7) are located in a heel of the piece of footwear (as shown in Fig.8) and at least one of the lighting element (80-84) is located on the sole (114) of the footwear.

As per claim 20, Wong discloses that the frequency controlled lighting system encased in housing (52) is located in a piece of footwear (50) such that the controller (64, 66, 68, 70-76, 92, 103-109 in Fig.7) and motion switch (102 in Fig.7) are located in a heel of the piece of footwear (as shown in Fig.4) and at least one lighting element (53-58) is located on the outer surface of the footwear.

As per claim 30, Wong discloses a frequency controlled lighting system comprising:
a motion switch (102) comprising:

a spring (37) having a fixed end and a free end, and

a metal contact (38) positioned proximate the free end of the spring for
electrical engagement by the free end of the spring,

wherein the motion switch (102) generates an activation signal in response to motion of the motion switch (102), the activation signal indicating at least a duration of time that the spring electrically engages the metal contact;

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a controller (64, 66, 68, 70-76, 92, 103-109) electrically connected to the motion switch to receive the activation signal, the controller comprising:

a signal analysis system (64, 66, 68, 92, 103, 105, 107) to analyze the activation signal, and a pattern generator (78, 70-76) to receive commands from the signal analysis

system and generate a dependent illumination pattern; and

lighting elements (80-84) electrically connected to said controller, the lighting elements selectively actuated by the pattern generator to illuminate the lighting elements in one or more of a series of predetermined illumination patterns

dependent upon commands from the signal analysis system (see Col.8, line 9- Col.9, line 18).

As per claim 43, Wong discloses in Fig.8 a footwear (110) including a controlled lighting system (112) comprising:

a motion switch (102) to generate an activation signal in response to movement of the motion switch, the activation signal indicating at least one of duration and frequency of electrical engagement within the motion switch;

a controller (64, 66, 68, 70-76, 92, 103-109) electrically connected to the motion switch to receive the activation signal; and

lighting elements (80-84), electrically connected to the controller, the lighting elements selectively actuated by the controller (via 78 and 70-76) to illuminate the lighting elements in one or more predetermined illumination patterns dependent on the duration and frequency of electrical engagement indicated by the activation signal (via 64, 66, 68, 92) (see Col.8, line 9- Col.9, line 18).

As per claims 44 and 45, Wong discloses that the motion switch is a spring motion switch (102) including a spring (37) having a fixed end and a free end, and a metal contact (38) positioned proximate the free end of the spring for electrical engagement by the free end of the spring. The recited limitation "the duration of electrical engagement is the duration of time the free end of the spring electrically engages the metal contact" is inherent based on how long or short the user wants the spring switch to stay closed so as to generate a sufficient electric pulse which may be delivered to the lighting system.

As per claims 59 and 60, Wong discloses in Fig.8 the motion switch and the controller as part of the lighting system (112) being located in a heel of the footwear (110).

As per claims 61-63, Wong discloses the lighting elements (53-58 or 80-84) being located in both the sole (51, 114) of the footwear (50, 110) and the outer surface of the footwear (50, 110) (see Figs.4 and 8).

As per claim 66, Wong discloses in Fig.7 a light flashing system comprising lighting elements (80-84) and a control circuit (64, 66, 68, 70-76, 92, 103-109) to selectively illuminate the lighting elements in a predetermined pattern (via 78 and 70-76) according to one of duration and frequency of engagement of a switch (102) (via 64, 66, 68, 92) (see Col.8, line 9- Col.9, line 18).

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by Yeung, Patent No. 6,776,498.

Yeung discloses a method for illuminating a series of lighting elements comprising: creating an activation signal based on the movement of a motion switch (2), based on the activation signal, determining a duration of electrical engagement and a frequency of electrical engagement within the motion switch for a period of time through signal watchdog (3) and flashing rate adjuster (4) (see Col.4, lines 26-32); illuminating at least one of a series of lighting elements (6) in response to activation of the motion switch through activation of flash driver (5); comparing the duration of electrical engagement to a predetermined duration level to determine an illumination pattern for the series of lighting elements through signal watchdog(3) (see also Col.4, lines 39-47); and comparing the frequency of electrical engagement within the motion switch to a predetermined frequency threshold to adjust the illumination pattern of the series of lighting elements through flashing rate adjuster (4) (see also Col.4, lines 29-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Fenton, Patent No. 5,245,517.

As per claim 4, Wong discloses the claimed invention substantially as explained above. Further, Wong discloses in Fig.10 a motion switch being a magnetic switch (130), Wong does not specifically disclose the motion switch being a magnetic reed motion switch which includes at least two contacts having a fixed end and a free end, wherein each contact is made of magnetic material, and an external magnet, positioned proximate the at least two contacts so that during movement of the switch a magnetic field from the external magnet forces the free end of each contact to electrically engage each other. Fenton discloses in Fig.3 a frequency controlled lighting system having a motion switch being a magnetic reed motion switch (28) which includes at least two contacts (28a, 28b) having a fixed end and a free end, wherein each contact is made of magnetic material, and an external magnet (28c), positioned proximate the at least two contacts so that during movement of the switch a magnetic field from the external magnet forces the free end of each contact to electrically engage each other (see Col.3, lines 26, 35-39 and 59-65). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the magnetic reed motion switch as taught by Fenton into the Wong type system. This can be achieved by replacing the Wong's magnetic switch with the Fenton's magnetic switch. Thus, it would allow a selectively open and close circuit that leads to energization or de-energization of light emitting elements, thereby causing emission of a flashing light that is clearly visible to an observer.

As per claim 5, Wong in view of Fenton discloses the claimed invention substantially as explained above. The recited limitation "the duration of electrical engagement is the duration of time the free end of each contact electrically engage each other" is inherent based on how long or short the user wants the magnetic switch to stay closed so as to generate a sufficient electric pulse which may be delivered to the lighting system.

As per claim 46, Wong discloses the claimed invention substantially as explained above. Further, Wong discloses in Fig.10 a motion switch being a magnetic switch (130), Wong does not specifically disclose the motion switch being a magnetic reed motion switch which includes at least two contacts having a fixed end and a free end, wherein each contact is made of magnetic material, and an external magnet, positioned proximate the at least two contacts so that during movement of the switch a magnetic field from the external magnet forces the free end of each contact to electrically engage each other. Fenton discloses in Fig.3 a frequency controlled lighting system having a motion switch being a magnetic reed motion switch (28) which includes at least two contacts (28a, 28b) having a fixed end and a free end, wherein each contact is made of magnetic material, and an external magnet (28c), positioned proximate the at least two contacts so that during movement of the switch a magnetic field from the external magnet forces the free end of each contact to electrically engage each other (see Col.3, lines 26, 35-39 and 59-65). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the magnetic reed motion switch as taught by Fenton into the Wong type system. This can be achieved by replacing the

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Wong's magnetic switch with the Fenton's magnetic switch. Thus, it would allow a selectively open and close circuit that leads to energization or de-energization of light emitting elements, thereby causing emission of a flashing light that is clearly visible to an observer.

As per claim 47, Wong in view of Fenton discloses the claimed invention substantially as explained above. The recited limitation "the duration of electrical engagement is the duration of time the free end of each contact electrically engage each other" is inherent based on how long or short the user wants the magnetic switch to stay closed so as to generate a sufficient electric pulse which may be delivered to the lighting system.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeung in view of Wong.

As per claim 22, Yeung discloses the claimed invention substantially as explained above. Further, Yeung discloses when the duration of electrical engagement is less than the predetermined duration level as ensured by the signal watchdog (3), the flash driver (5) is activated to generate luminous signal with flashing frequency, thereby illuminating the series of lighting elements (6) in one or more of a series of flashing patterns (see also Col.7, lines 58-60 and Col.8, lines 1-28). Yeung does not disclose the step of freezing any current flashing pattern and illuminating a single lighting element when the duration of electrical engagement is greater than the predetermined duration level. Wong discloses the illumination method having a step of freezing any current

flashing pattern as the output signal from the timing circuit (92) causes the pulse-generation means (68) to stop delivering drive signals to the means for generating a pattern of signals (78) and also causes the pulse-generation means (68) to disengage the primary gate (70) once the contact signals from the triggering means (66) reach the predetermined time interval and the output from the timing circuit is connected to the pulse-generation means in such a manner as to allow only one of the plurality of LEDs to be illuminated once the contact signals from the triggering means (66) reach the predetermined duration level (see Col.11, lines 14-24). Note that the recited limitation "greater than" is inherent in "reach", since the latter can represent a range with a lowest point and a highest point and in that the predetermined duration level can be read to be the lowest point. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ the freezing and illuminating steps as taught by Wong into the Yeung type system, because it would allow an other dimension to the system to be controlled to have only one LED illuminated instead of a plurality of LEDs, thereby affecting the operation of the system.

As per claim 23, Yeung in view of Wong discloses the claimed invention substantially as explained above. Further, Wong discloses the contact signals being at below the predetermined time interval, i.e. the timing circuit (92) is now inactive, causing the freezing of any current flashing pattern and the illuminating of a single lighting element to cease (see Col.12, lines 60-62 and Col.2, lines 39-42).

Allowable Subject Matter

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Claims 6-18, 24-29, 31-42 and 48-58, 64 and 65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wong et al., Pub. No. 2005/0057188 ; Wong, Patent No. 6,682,202; Cheung, Patent No. 6,843,578; Greenberg, Pub. No. 2002/0186151.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 8:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571)272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp

Haissa Philogene
Primary Examiner
A.U. 2828
